

Please replace the paragraph at page 18, paragraph [0047], with the following rewritten paragraph:

[0047] If the internetwork-connection and edge-packet transfer unit 20 shown in Fig. 5 is employed, the packet recognizing unit 21 recognizes the edge-packet transfer unit 2 that is to serve the next destination of the packet received by the upper-stage-packet transmitting/receiving unit 27 or the lower-stage-packet transmitting/receiving unit 28. The upper-stage-packet transmitting/receiving unit 27 or the lower-stage-packet transmitting/receiving unit 28 corresponding to the next destination edge-packet transfer unit 2 (when the next destination edge-packet transfer unit is the edge-packet transfer unit 20 itself, the lower-stage-packet transmitting/receiving unit [[27]] 28 corresponds to the next destination edge-packet transfer unit) transmits the packet.

Please replace the paragraph at pages 18-19, paragraph [0048], with the following rewritten paragraph:

This processing is repeatedly performed until the packet is transmitted from the external packet transfer external-packet transmitting/receiving unit 22 of the final edge-packet transfer unit 2 (which serves as the next destination edge-packet transfer unit and to which the user network 5 connected to the destination user terminal 6 is connected through the access network 4). It is thereby possible to realize a desired packet communication by the full-mesh multistage network.

Please replace the paragraph at pages 32-33, paragraph [0093], with the following rewritten paragraph:

[0093] [SEVENTH EMBODIMENT]

As shown in Fig. 14, the packet is input from the external-packet transmitting/receiving unit (or the lower-stage-packet transmitting/receiving unit or upperstage-packet transmitting/receiving unit-or the lower-stage-packet transmitting/receiving unit itself) or the full-mesh WDM transmission unit 1. In addition, the destination of the input packet identified by the packet recognizing unit 21 is the other edge-packet transfer unit 2 (or the internetwork-connection and edge-packet transfer unit) connected to the full-mesh WDM transmission unit 1. The internal edge packet transmitting/receiving unit (or the upper-stagepacket transmitting/receiving unit or the lower-stage-packet transmitting/receiving unit) of the edge-packet transfer unit 2 (or internetwork-connection and edge-packet transfer unit) transmits the packet that is to follow an alternative path to the wavelength path 12 of the fullmesh WDM transmission unit 1 corresponding to the other edge-packet transfer unit 2 (or the internetwork-connection and edge-packet transfer unit). In this case, if the resource state of the wavelength path 12 is determined to be equal to or higher than a threshold based on the resource state information on the wavelength path received from the resource management unit 25, the internal edge packet transmitting/receiving unit (or the upper-stage-packet transmitting/receiving unit or lower-stage-packet transmitting/receiving unit) transmits the packet to the other wavelength path (alternative wavelength path) 14.

Please cancel the original Abstract at page 56, lines 1-13 in its entirety and insert therefor the following replacement Abstract on a separate sheet as follows: